

## Calendar

### Friday, March 18

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** Joint Experimental Theoretical Physics Seminar - 1 West

Speaker: D. Zieminska, Indiana University

Title: Lifetime Difference and A Limit on Mixing in the Bs System from DZero

### Sunday, March 20

**2:30 p.m.** Gallery Chamber Series - 2nd Flr X-Over

Rembrandt Chamber Players

Tickets: \$15

### Monday, March 21

**2:30 p.m.** Particle Astrophysics Seminar - Curia II

Speaker: T. Wiseman, Harvard University

Title: Black Holes and Extra Dimensions

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** All Experimenters' Meeting - Curia II

Special Topics: CDF Silicon Detector Damage Update and DZero Luminosity Measurement

## Weather



Mostly Cloudy 43°/35°

[Extended Forecast](#)

[Weather at Fermilab](#)

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Dark Matter Search Marks Return of Bubble Chamber



The bubble chamber sits inside the pressure chamber, which will be lowered into the MINOS gallery sometime next week. (Click on image for larger version.)

A team of Fermilab and University of Chicago scientists have resurrected an old particle detection technique and created a bubble chamber to find elusive dark matter. "If this goes as planned, we could have one of the best dark matter detectors in the world," said Juan Collar, principal investigator at the University of Chicago for the project, called the Chicagoland Observatory for Underground Particle Physics.

The bubble chamber, roughly the size of a soccer ball and filled with a common halide  $\text{CF}_3\text{I}$ , will attempt to find dark matter by nuclear recoil events caused by WIMPs, weakly interacting massive particles that are less massive and less reactive than neutrinos. The WIMPs physically slam against the superheated  $\text{CF}_3\text{I}$  nuclei and move it, starting a domino effect in the compressed liquid that quickly grows to visible size. The detector, which "has an exquisite level of sensitivity," according to Collar, is scheduled to be lowered into the MINOS

## 'Wonders' Amaze Local Kids



Kids and parents watch and enjoy "The Wonders of Science" show (Click on image for larger version.)

The 18th annual "Wonders of Science" event drew a sellout crowd to Ramsey Auditorium last Sunday, March 13th. The show, aimed at kids 7-12, featured physics and chemistry demonstrations from the "Weird Science" team of teachers. When audience volunteers were requested, hundreds of small hands shot into the air.

Fermilab's Education department, which organized the event, hoped to entertain and teach kids about science. "We wanted to show that science can be fun, that it is a class to look forward to, and something they can do later in life," said Education's Spencer Pasero. "Science is not something done by a stodgy guy in a lab coat holed up in his lab since 1962."

A beach ball suspended in midair by leaf blowers demonstrated Bernoulli's Principle of pressure differences. A fire extinguisher-powered car, like the one seen on "The Late Show" with David Letterman last month, illustrated Newton's

## Friday, March 18

Cream of Wild Mushroom Soup

Blackened Fish Filet Sandwich

Mediterranean \$4.75

Style Baked Fish \$3.75

Casserole Florentine with Italian Sausage  
\$3.75

Eggplant Parmesan Panini \$4.75

Pizza Supreme \$2.75

Baked Potato Bar w/ Chili \$4.75

The Wilson Hall Cafe now accepts Visa,  
Master Card, Discover and American  
Express at Cash Register #1.

### [Wilson Hall Cafe Menu](#)

[Chez Leon](#) is now open. Call x4512 to  
make your reservation.

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gallery sometime next week, with usable  
data after a few weeks and an overall run  
time of a few months.

Trial runs at the University of Chicago  
have been quite successful. "It has  
surprised us at every turn," said PPD  
Mechanical Department head Mike  
Crisler. "It has worked like gangbusters  
from the start." The current model is a  
prototype for a bigger one that will be  
placed in an even deeper chamber.  
Roger Hildebrand, who made the first  
bubble chambers in the 1940's and is now  
in his 90's, has helped with the guidance  
and inspiration for this recent  
reincarnation.

- Eric Bland

### Photo of the Day

## The Luck of the Irish



Crae Peich (left) of the Accounting  
Department and Sharon Larson of  
Procurement know how to celebrate St.  
Patrick's Day in style. (Click on image for  
larger version.)

### In the News

third law of motion that for every action  
there is an equal and opposite reaction.  
Even the Linac was represented by a ball  
bearing accelerator. Mary Jo Murphy, a  
docent for the Education office, helped  
design the show.

Each child left the show with a take-home  
kit filled with ideas for home science  
experiments with simple household items.  
"It's great to see the kids get their kit and  
instantly start looking through it," said  
Pasero. "They can't wait to get home and  
try it."

- Eric Bland

### Announcements

## New Classifieds Posted on *Fermilab Today*

New [classified ads](#) have been posted on  
*Fermilab Today*. A permanent link to the  
classifieds is located in the bottom left  
corner of *Fermilab Today*.

## Building Better Bones

Back by popular demand, Building Better  
Bones will be offered on March 23 at  
noon Curia-II. A brief lecture on  
Osteoporosis will be followed by a free  
bone scan for any woman attending the  
lecture. Jody Springsteen, BSN, CRRN  
cover osteoporosis risk factors, diagnosis  
and prevention.

## Fermilab Folk Club Barn Dance

The next Fermilab Folk Club Barn Dance  
will be on Sunday, March 20 at 2 p.m.  
with fiddling by Jordan Wankoff and  
calling by Paul Tyler.

[more information](#)

## [Upcoming Activities](#)

## **FYI: AIP Bulletin of Science Policy News, March 17, 2005**

### **Key Hearings on DOE Science Request**

#### **Focus on FY 2006 Budget Tradeoffs**

Last Wednesday was both a busy and important day on Capitol Hill for Ray Orbach, Director of the Department of Energy's Office of Science. At 10:00 a.m., Orbach testified at a hearing of the House Appropriations Subcommittee on Energy and Water. Later that day he appeared on the other side of Capitol Hill at the Senate's counterpart subcommittee.

[read more](#)

## **University of Chicago, Press Office, March 17, 2005**

### **Robert Rosner named Director of Argonne National Laboratory**

The University of Chicago has appointed Robert Rosner to the directorship of Argonne National Laboratory effective April 18. His appointment was approved by Secretary of Energy Samuel W. Bodman.

[read more](#)